

#17C  
u. n.  
8/15/02

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: THATCHER, *et al.*  
Serial Number: 09/473,713  
Filed: December 29, 1999  
Group Art Unit: 1614  
Title: Methods and Compositions for Mitigating Pain  
Examiner: Delacroix-Muirheid, C.  
Agent Ref. No.: 1995-033-12US

## CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the Commissioner for Patents, Washington DC 20231 on the date set forth below:

16 July 2002

Date

S. J. Scribner  
Stephen J. Scribner Reg. No. 44,452

Assistant Commissioner for Patents  
Washington, D.C. 20231

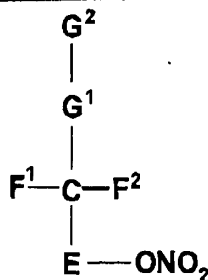
Dear Sir,

## AMENDMENT and RESPONSE TO OFFICE ACTION

This is responsive to the Office Action dated January 16, 2002. A Petition for Extension of Time of three months and fee authorization are attached hereto. Please amend the instant application as shown below:

## IN THE DISCLOSURE:

Please replace the formula on page 3, lines 15 to 19 with the following rewritten formula:



✓  
Please replace the paragraph on page 3, lines 21 to 22 with the following rewritten paragraph:

C<sup>2</sup> in which E, F<sup>1</sup>, F<sup>2</sup>, G<sup>1</sup>, and G<sup>2</sup> are the same or different organic radicals which may be joined in cyclic ring systems, and which may contain inorganic counterions;

✓  
Please replace the paragraph on page 3, lines 23 to 24 with the following rewritten paragraph:

C<sup>3</sup> with the proviso that when E and G<sup>1</sup> are methylene groups and F<sup>1</sup> is H, G<sup>2</sup> is not a nitrate group, nor R<sup>N</sup>-Z<sup>N</sup>;

✓  
Please replace the paragraph on page 4, lines 1 to 3 with the following rewritten paragraph:

C<sup>4</sup> In a preferred embodiment, F<sup>2</sup> is a nitrate group and E, F<sup>1</sup>, G<sup>1</sup>, G<sup>2</sup> are the same or different organic radicals which may be joined in cyclic ring systems, and which may contain inorganic counterions;

✓  
Please replace the paragraph on page 4, lines 4 to 5 with the following rewritten paragraph:

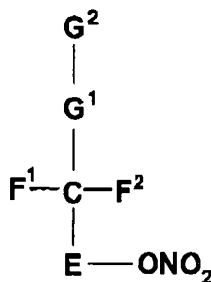
C<sup>5</sup> with the proviso that when E and G<sup>1</sup> are methylene groups and F<sup>1</sup> is H, G<sup>2</sup> is not a nitrate group, nor R<sup>N</sup>-Z<sup>N</sup>;

✓  
Please replace the paragraph on page 4, line 8 with the following rewritten paragraph:

C<sup>6</sup> wherein R<sup>NN</sup> is a short chain alkyl group (C<sub>1</sub> - C<sub>12</sub>).

✓  
Please replace the formula on page 4, lines 15 to 19 with the following rewritten formula:

C<sup>7</sup>



✓  
Please replace the paragraph on page 4, lines 20 to 22 with the following rewritten paragraph:

C8

in which  $F^2$  is an organic radical which may be joined in a cyclic ring system with  $G^2$ , and which may contain inorganic counterions; E and  $G^1$  are both methylene groups;  $F^1$  is H; and  $G^2$  is  $R^N.Z^N$ ;

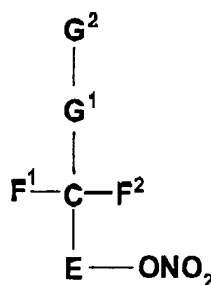
✓  
Please replace the paragraph on page 4, lines 28 to 29 with the following rewritten paragraph:

C9

In a preferred embodiment,  $F^2$  is a nitrate group; E and  $G^1$  are methylene groups;  $F^1$  is H; and  $G^2$  is  $R^N.Z^N$ ;

✓  
Please replace the formula on page 5, lines 12 to 16 with the following rewritten formula:

C10



✓  
Please replace the paragraph on page 5, line 18 with the following rewritten paragraph:

C11

in which E is  $(R^1R^2O)_m$  and  $G^2-G^1-CF^1F^2$  is  $R^{19}-(R^3R^4O)_p-(R^{17}R^{18}O)_n$ ;

✓  
Please replace the paragraph on page 8, line 19 to page 9, line 7 with the following rewritten paragraph:

C12

where A is selected from: a substituted or unsubstituted aliphatic group (preferably a branched, or straight-chain aliphatic moiety having from 1 to 24 carbon atoms in the chain, which optionally may contain O, S,  $NR^6$  and unsaturations in the chain, optionally bearing from 1 to 4 hydroxy, or nitrate, or amino or aryl, or heterocyclic groups; an unsubstituted or substituted cyclic aliphatic moiety having from 3 to 7 carbon atoms in the aliphatic ring, which optionally may contain O, S,  $NR^6$  and unsaturations in the ring, optionally bearing from 1 to 4 hydroxy, or nitrate, or amino or aryl, or heterocyclic groups; an unsubstituted or substituted aliphatic moiety constituting a linkage of from 0 to 5 carbons, between  $R^1$  and  $R^3$  and/or between  $R^{17}$  and  $R^4$ , which optionally may contain O, S,  $NR^6$  and unsaturations in the linkage, and optionally bearing from 1 to 4 hydroxy, or

C12  
cont.

nitrate, or amino or aryl, or heterocyclic groups); a substituted or unsubstituted aliphatic group (preferably a branched, cyclic or straight-chain aliphatic moiety having from 1 to 24 carbon atoms in the chain), containing carbonyl linkages (e.g., C=O, C=S, C=NOH), which optionally may contain O, S, NR<sup>6</sup> and unsaturations in the chain, optionally bearing from 1 to 4 hydroxy, or nitrate, or amino or aryl, or heterocyclic groups; a substituted or unsubstituted aryl group; a heterocyclic group; amino (including moieties), arylamino, diarylamino, and alkylarylamino); hydroxy; alkoxy; a substituted or unsubstituted aryloxy;

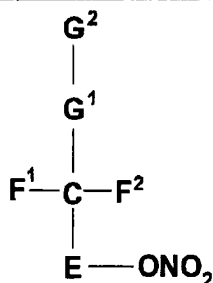
Please replace the paragraph on page 9, lines 20 to 23 with the following rewritten paragraph:

C13

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup>, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup> are the same or different alkyl or acyl groups containing 1 - 24 carbon atoms which may contain 1 - 4 ONO<sub>2</sub> substituents; or C<sub>1</sub> - C<sub>6</sub> connections to R<sup>1</sup> - R<sup>4</sup> in cyclic derivatives; or are each independently hydrogen; a nitrate group; or W;

Please replace the formula on page 19, lines 15 to 19 with the following rewritten formula:

C14



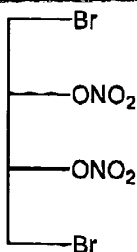
Please replace the paragraph on page 19, lines 20 to 21 with the following rewritten paragraph:

C15

wherein: E, F<sup>1</sup>, F<sup>2</sup>, G<sup>1</sup>, G<sup>2</sup> are the same or different organic radicals which may be joined in cyclic ring systems, and which may contain inorganic counterions.

Please replace formula IIIj on page 24 with the following rewritten formula:

C16





STEPHEN J. SCRIBNER, Ph.D.  
PATENT AGENT  
DIRECT TELEPHONE: (613) 533-6000, Ext. 77483  
EMAIL: 38549@post.queensu.ca

**FAX RECEIVED**

**JUL 17 2002**

**GROUP 1600**

**FACSIMILE COVER SHEET**

**TO: Examiner Delacroix-Muirheid, C.**  
**Group Art Unit 1614**

**OFFICIAL**

**Company:** U.S. Patent Office  
**Location:** Washington, D.C.  
**Phone:** (703) 306-3227  
**Fax:** (703) 308-4242

**FROM: Stephen J. Scribner**  
**Reg. No. 44,452**

**Phone:** (613) 533-2342  
**Fax:** (613) 533-6853

**U.S. Serial No.:** 09/473,713  
**Attorney Docket No.:** 1995-033-12US

**Date:** 16 July 2002  
**Sent By:** Stephen J. Scribner  
**Pages including this cover page:** 53

**MESSAGE:**